UNITED STATES PATENT AND TRADEMARK OFFICE

A

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/667,364	09/23/2003	Jong-Eun Won	Q76839	9202

23373 7590 11/03/2005

SUGHRUE MION, PLLC
2100 PENNSYLVANIA AVENUE, N.W.
SUITE 800
WASHINGTON, DC 20037

EXAMINER	
RAY, GOPAL C	
ART UNIT	**PAPER NUMBER**
2111	

DATE MAILED: 11/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/667,364	WON, JONG-EUN	
	Examiner	Art Unit	
	Gopal C. Ray	2111	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 October 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-24* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-24* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *9/19/05*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

1. The examiner acknowledges the amendment to claims 1, 2, 8, 9, 15, 16 and addition of new claims 17-24 by the amendment filed on 10/17/05. Claims 1- 24 are presented for examination.

2. The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification. Furthermore, all claims should be revised carefully to eliminate all grammatical errors and antecedent basis problems.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

4. Claims 1, 8, 9, 15-17 and 21-22 are rejected under 35 U.S.C. § 102(a) as being anticipated by US Patent 6,442,638 granted to Ain et al.

As per claim 1, the reference of Ain et al. teaches "a first unit connected to a host device" in Fig. 1, elements 12 and 16; "a medium insertion/removal sensing unit which senses when a medium is inserted into the first unit or when the medium is removed from the first unit" in Fig. 2, element 20 and col. 3, line 39 – col. 4, line 10; "a hot-plug signal control unit which outputs a hot-plug signal control when the medium is inserted or removed" in Fig. 2, element 21 and col. 4, lines 51-59.

As per claim 8, the claim recites a method. However, the limitations of the claim are parallel to the limitations of claim 1. In teaching the construction and use of the device, US Patent 6,442,638 granted to Ain et al. teaches a corresponding method.

As per claim 9, the claim is rejected for similar reasons as discussed in the rejection of claim 8 above.

As per claim 15, the claim is rejected for similar reasons as discussed in the rejection of claim 1 with the exception of "a computer readable medium storing a computer program for executing a hot-plug signal generation". However, the reference of Ain et al. teaches the feature in Fig. 2, element 13.

As per claim 16, the claim is rejected for similar reasons as discussed in the rejection of claim 15 above.

As per claim 17, the claim is rejected for similar reasons as discussed in the rejection of claim 1 above.

As per claims 21-22, each claim is rejected for similar reasons as discussed in the rejection of claim 8 above.

5. The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 2, 5, 12 and 18 are rejected under 35 U.S.C. § 103(a) as being unpatentable over US Patent 6,442,638 granted to Ain et al. in view of US Patent 6,553,444 granted to Holmquist et al.

As per claim 2, the claim is rejected for the same reasons as discussed in the rejection of claim 1 with the exception of "a switch that outputs the hot-plug signal".

However, the above feature was well known to one ordinary skill in the art at the the invention was made as evidenced by Holmquist et al. The reference of Holmquist et al. teaches the feature in Fig. 3, element 128. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Ain et al. to implement the above feature to obtain the claimed invention because this is one of the possibilities already known in the data processing art which one of ordinary skill in the art at the time of the invention would select under circumstances without the exercise of inventive skill so as to allow the system to take advantage of the many benefits provided by a switch such as quick turn on or off either mechanically or electronically.

As per claim 5, the reference of Holmquist et al. teaches "wherein the medium insertion unit transmits the sensor signal to the switch" in Fig. 3, element 117 and col. 4, lines 54-56. The motivation of combining references discussed in claim 2 is also applicable here.

As per claim 12, the added feature of the claim is rejected for the same reasons as discussed in the rejection of claim 5 above.

As per claim 18, the claim is rejected for similar reasons as discussed in the rejection of claim 2 above.

7. Claims 3, 4, 10, 11, 19, 20, 23 and 24 are rejected under 35 U.S.C. § 103(a) as being unpatentable over by US Patent 6,442,638 granted to Ain et al. and in view of US Patent 6,684,283 granted to Harris et al. with/without US Patent 6,553,444 granted to Holmquist et al. as applied above.

As per claim 3, the claim is rejected for the same reasons as discussed in the rejection of claim 1 with the exception of "wherein the media is a memory stick". However, the above feature was well known to one of ordinary skill in the art at the time the invention was made as evidenced by Harris et al. The reference of Harris et al. teaches the feature in col. 5, lines 31-32. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Ain et al. to implement the above feature because this is one of the possibilities already known in the data processing art which one of ordinary skill in the art at the time of the invention would select under circumstances without the exercise of inventive skill so as to allow the system to be compatible with a widely used standard and to allow the system to take advantage of the many benefits provided by the feature.

As per claims 4, 10, 11, 19, 20, 23 and 24, the added limitation of each claim is same as in claim 3 and is rejected for the same reasons as discussed in the rejection of claim 3 above.

8. Claims 6, 7, 13 and 14 are rejected under 35 U.S.C. § 103(a) as being unpatentable over by US Patent 6,442,638 granted to Ain et al. in view of US Patent 6,442,734 granted to Hanson et al. with/without US Patent 6,553,444 granted to Holmquist et al. as applied above.

As per claim 6, the claim is rejected for the same reasons as discussed in the rejection of claim 1 with the exception of "the hot-plug signal is a D+ or D- signal defined in a USB standard. However, D+ or D- signal defined in a USB standard was well known to one of ordinary skill in the art at the time the invention was made as evidenced

by Hanson et al. The reference of Hanson et al. teaches the feature in Figures 2A-B. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Holmquist et al. to implement the above feature so as to allow the system to be compatible with a widely used standard and to allow the system to take advantage of the many benefits such as accommodating a wide variety of computer peripherals in the system.

As per claims 7, 13 and 14, the added limitation of each claim is same as in claim 6 and is rejected for the same reasons as discussed in the rejection of claim 6 above.

9. Applicant's arguments filed on 10/17/05 have been fully considered but are moot in view of the new ground(s) of rejection.

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Applicant is urged to consider the references. However, the references should be evaluated by what they suggest to one versed in the art, rather than by their specific disclosure.

If applicants are aware of any prior art better than those are of record, they are required to bring the prior art to the attention of the examiner. The prior art submitted by applicant has been considered by the examiner and made of record in the file. Applicants are reminded that each individual associated with the filing and prosecution of a patent application has a duty of candor and good faith in dealing with the Office, which includes a duty to disclose to the Office all information known to that individual to be material to patentability as defined in 37 CFR 1.56. Applicants are advised to submit any information material to patentability in accordance with 37 CFR 1.97 and 1.98.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gopal C. Ray whose telephone number is (571) 272-3631. The examiner can normally be reached on Monday - Friday from 8:00 AM - 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Rinehart, can be reached on (571) 272-3632. The fax phone number for this Group is (571) 273-8300.

Communications via Internet e-mail regarding this application, other than those under 35 U.S.C. 132 or which otherwise require a signature, may be used by the applicant and should be addressed to [**mark.rinehart@uspto.gov**].

All Internet e-mail communications will be made of record in the application file. PTO employees do not engage in Internet communications where there exists a possibility that sensitive information could be identified or exchanged unless the record includes a properly signed express waiver of the confidentiality requirements of 35 U.S.C. 122. This is more clearly set forth in the Interim Internet Usage Policy published in the Official Gazette of the Patent and Trademark on February 25, 1997 at 1195 OG 89.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to TC central telephone number is (571) 272-2100. Moreover, information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Lastly, paper copies of cited U.S. Patents and Patent Application Publications ceased to be mailed to applicants with office actions as of June 2004. Paper copies of Foreign Patents and Non-Patent Literature will continue to be included with office actions. These cited U.S. Patents and Patent Application Publications are available for download via Office's PAIR. As an alternate source, all U.S. Patents and Patent Application Publications are available on the USPTO web site (www.uspto.gov), from the office of Public Records and from commercial sources. Applicants are referred to the Electronic Business Center (EBC) at http://www.uspto.gov/ebc/index.html or 1-866-

217-9197 for information on this policy. Requests to restart a period for response due to a missing U.S. Patent or Patent Application Publications will not be granted.

Gopal C. Ray

GOPAL C. RAY
PRIMARY EXAMINER
GROUP 2100